CHAPTER 2

Corporate Governance and Its Reform

Corporate governance is the system of checks and balances that guides the decisions of corporate managers. As such, it affects the strategy, operations, and performance of business firms over a large segment of the economy: corporations during 2001 accounted for 60 percent of U.S. gross domestic product (GDP). Corporate governance also affects the ability of those outside the corporation—including investors—to monitor the quality of management and its decisions and to influence and even control some of those decisions. This observability, or transparency, can greatly enhance a corporation's ability to raise funds from outside investors. It can also make it easier for other outsiders, including suppliers and customers, to transact with the corporation, by making the incentives and abilities of its managers and other employees more clear.

Households increasingly participated in the ownership of corporate stock during the 1990s. Fewer than one-third of U.S. households—31.6 percent—owned corporate stock directly or indirectly in 1989. By 1992 that number had grown to 36.7 percent. More than half—51.9 percent—of households owned stock as of 2001, the latest year for which comparable survey statistics are available. The greatest percentage-point increases in household stock ownership appear to have occurred in groups where it was lowest at the start of the decade, for example among households with moderate rather than high levels of income.

Access to well-developed financial markets accounts for some of the success that U.S. corporations and their managers have enjoyed in attracting capital from outside investors. U.S. securities markets are among the best in the world. Their relative depth and liquidity make it easier for investors to buy and sell common stock and other corporate securities, and this makes investments in U.S. corporations more attractive. The relative efficiency of U.S. securities markets is not the only reason for households' willingness to invest in corporations, however.

To compete successfully in well-developed financial markets, corporations must win and maintain investors' confidence. To do this, managers must provide sufficient information about their firms' prospects to persuade investors that they can realistically expect a competitive return on their investments. This is not always easy, even for a seasoned corporation whose investment prospects are strong. Part of the difficulty is that managers, as insiders, generally know more than outside investors know about the

corporation, the managers' competence, and their likely diligence in managing the investors' funds. Facing this information disadvantage, investors demand reliable information about the corporation and its management. Specifically, they seek assurance that the corporation's investment prospects—and its managers' competence—are as good as the managers might claim.

Investors also demand assurance that managers will work diligently in their interest. It is not generally realistic for investors to expect managers to exercise the same diligence with funds provided by others that they would if only their own funds were at stake. Thus some costs of delegating decisions to management inevitably arise when managers go outside the corporation for funds. These costs of separating ownership from control—what economists sometimes call agency costs—are not the same for all corporations, because the importance of managerial discretion in decision making tends to vary across industries, and among firms in the same industry. Diligent managers with good investment prospects may thus run the risk of being overlooked by investors or receiving funds on less favorable terms, if they do not adequately meet investors' demand for information. For their part, investors who lack reliable information can miss out on good investment prospects.

The value to managers, investors, and other participants in corporations of finding efficient ways to meet this demand for assurance about the quality of corporate investment opportunities can be high. One solution is for managers to create systems of checks and balances that shape the conduct of their corporations and that outsiders can readily observe. Checks and balances governing the choice of managers and projects, for example, can commit the corporation, through rules and incentives, to employ more talented managers and to pursue more promising investment prospects. Transparent systems for setting management compensation and procedural safeguards on managers' actions can reduce the agency costs of delegating decisions to management. By creating strong systems of corporate governance, managers can thus improve both the efficiency of their firms and the terms on which financing is available to them.

Strong corporate governance generally involves some form of publicly revealed commitment to whatever checks and balances have been instituted. This can be critical to meeting investor demand for assurance. Typically it is not enough for managers simply to claim that they have instituted certain systems and procedures and promise to maintain them; investors must be able to verify that those systems and procedures are actually in place and that the commitment to maintain them is real. This assures investors that these arrangements are not likely to unravel when they are not looking.

The standards for strong corporate governance are thus high. Fortunately, managers of U.S. corporations have a solid foundation on which to build. Nationwide markets for capital and for management talent, together

with a strong legal system and a long tradition of sound internal corporate governance, provide managers with incentives to innovate and powerful tools for communicating credibly with outsiders.

One might think that laws and regulations by themselves could provide investors the assurances they seek. Some researchers have indeed attributed the comparative success of U.S. corporations in attracting small investors to the relative strength of the U.S. legal system. The capacity of the U.S. court system to provide impartial adjudication stands in contrast with what researchers have found in some other countries. The lack of a court system that can resolve disputes fairly can limit the willingness of investors—especially small or unsophisticated investors—to provide corporations with funds. This may partly explain why, in some other countries, large institutions such as banks play a bigger role in supplying financing to corporations than they do in the United States, where households play a greater role. The impartial adjudication of disputes by U.S. courts is something many U.S. investors may take for granted.

Yet some effective corporate governance solutions have evolved in the United States without express legal or regulatory guidance. Some contemporary institutions whose existence is usually attributed to certain laws appear, in fact, to predate those laws. The presence, relatively early in the Nation's history, of strong financial markets—such as major stock exchanges—made it easier for managers to create strong, transparent systems of checks and balances that did not rely on the courts. Those conditions appear to have allowed managers and corporations to develop reputations for quality, or to efficiently rely on the reputations of well-known intermediaries, as means of providing assurance to outside investors. Finally, legal solutions are sometimes limited by the fact that contracts are often left incomplete, in the sense that they do not specify what should happen under all possible contingencies. This reflects the potentially prohibitive costs of writing agreements down so that a judge can later verify their existence in the event of a dispute. It is costly not just to anticipate possible future sources of disagreement, but also to involve attorneys and other legal experts in drafting provisions to deal with those eventualities, not to mention any time that might be spent in court.

The existence of *both* strong markets and a strong legal system can thus explain U.S. corporations' comparative effectiveness in meeting investor demand for assurance. Market solutions and legal solutions can be substitutes or complements for one another. Their comparative strengths can change over time as market conditions change. It would thus be a mistake to view the advantage of one over the other as absolute. As markets evolve, the effectiveness of legal solutions can change, and with it the comparative advantage of markets in helping managers more closely align their actions with the shareholders' interest and communicate this alignment credibly to investors.

Accordingly, effective corporate governance in the United States rests on a foundation with three parts: legal institutions, external market forces, and internal governance systems that respond to both. The next section of this chapter explains how these parts work together to enable corporations to develop systems of corporate governance that are responsive to investors. It discusses how this foundation permits corporations to make adjustments to their corporate governance systems over time, to respond to changing market conditions.

This adaptive capacity of U.S. corporate governance has indeed been critical to the ability of corporations—and the government—to respond to recent changes in market conditions. During 2002, corporate managers faced heightened demand for assurance from investors. At the same time, allegations of misconduct by some managers and external auditors underscored the value of updating some of the laws and regulations that govern corporate conduct. The alleged misconduct, in part, involved failure to provide accurate information about corporate financial and operating performance. These difficulties—and related, potentially severe harms to investors and employees—underscored concerns about possible weaknesses in U.S. corporate governance that had emerged over the past decade. Many corporations have instituted changes accordingly. It was in this setting—and in light of the important role that U.S. corporations, and thus U.S. corporate governance, play in the global economy—that the President in March 2002 called for meaningful reform.

In calling for reform, the President set forth a plan that applies three core principles of effective corporate governance: accuracy and accessibility of information, accountability of management, and independence of auditors. The plan recognizes the complexity of modern corporate governance systems and their inherent flexibility. The call for careful reexamination of private customs and legal rules led to further changes in private sector institutions and the creation, in July 2002, of the Corporate Fraud Task Force, comprising law enforcement officials from the Department of Justice, the Securities and Exchange Commission (SEC), and other government agencies. (Table 2-1 illustrates the stepped-up enforcement efforts of the SEC during this period and some of the results achieved during the same period.) It also led, that same month, to the President signing new legislation, the Sarbanes-Oxley Act of 2002, which the SEC is now implementing through a series of new regulations being issued in phases during 2002 and 2003. These changes constitute one of the most significant reforms of U.S. corporate governance since the establishment of the SEC itself in 1934.

The President's plan targeted the underlying causes of concern about investor confidence. The suggestion of a crisis in investor confidence, which captured the attention of policymakers during 2002, followed a substantial increase in the number of earnings and other financial restatements—corrections to previously

TABLE 2-1.—*SEC Enforcement Efforts and Outcomes, 2000-2002*

SEC activity	FY 2000	FY 2001	FY 2002
Financial fraud and issuer reporting actions filed	103	112	163
Officer and director bars sought	38	51	126
Temporary restraining orders filed	33	31	48
Asset freezes	56	43	63
Trading suspensions	11	2	11
Subpoena enforcement actions	8	15	19
Disgorgement ordered (millions)	$463	$530	$1,328
Penalties ordered (millions)	$44	$56	$116

Source: Securities and Exchange Commission.

issued statements—by U.S. public corporations, dating back to the mid-1990s. There are sometimes good reasons for corporations to restate earnings. Yet a Federal agency report noted that financial restatements by large, well-known public companies "have erased billions of dollars of previously reported earnings and raised questions about the credibility of accounting practices and the quality of corporate financial disclosure and oversight in the United States." The occurrence of so many restatements, in combination with high-profile allegations of misconduct, created an impression that abuses in financial reporting had become widespread.

Restatements of financial reports raise concern because they can leave investors doubting the quality of the restated reports or, worse, those of other companies that have not issued restatements. Similarly, although relatively few restatements appear to be linked to management misconduct, innocent managers can suffer from the perception that a few managers create about the quality of management generally. The appearance of widespread restatements or misconduct can thus create a misimpression about the conduct of corporations nationwide. In fact, most large U.S. corporations have shown no signs of having to restate their earnings or otherwise warranting scrutiny from the SEC, the entity charged with enforcing U.S. financial disclosure rules. This remains true even after investors, enforcement officials, and managers not implicated in any offenses stepped up their efforts to expose misconduct, following the President's call for reform in March 2002.

During the late 1990s the number of companies that filed earnings restatements grew dramatically. After averaging 50 a year from 1991 to 1997, the number of restatements increased to 96 in 1998, 204 in 1999, 163 in 2000, and 153 in 2001, according to one study of certain types of

restatements, compiled through a keyword search of news databases. About 10 percent of companies listed on major stock exchanges issued restatements from January 1997 through June 2002, according to another study using a similar method. The implication is that about 90 percent of public corporations, which have been the focus of concern, stuck with their original financial reports during that period. Moreover, signs of error or misconduct in financial reporting have not been randomly distributed among U.S. corporations but rather have tended to concentrate in certain industries. Earnings restatements have occurred with greater frequency among technology companies than among other companies, for example.

The more frequent occurrence of restatements in some industries may reflect the unusual challenges those industries faced during the second half of the 1990s. Those circumstances may have created valid reasons for restating earnings but may also have created new opportunities for misconduct, which the markets and legislators have moved quickly to correct. Governance structures themselves also tend to vary across corporations. The different experiences of corporations in different industries, under different market conditions and at different times, underscore the importance of exercising caution before applying any one governance solution to all corporations or unduly locking corporations into inflexible regulatory solutions.

The rest of this chapter is in two main parts. The first part surveys the economic foundation of corporate governance and its reform. Corporate governance was once solely the province of law: legal scholars and practitioners generated much of what was written on the subject, not to mention most of the governance advice that corporations received. However, advances in economic research over the past few decades, primarily in corporate finance, have shed light on the critical role that corporate governance can and does play in enhancing corporate efficiency and in increasing the depth and liquidity of financial markets. The second part of the chapter provides an overview of recent reforms and their anticipated contribution to the quality of corporate governance, with special attention to new Federal legislation passed during 2002. This is followed by a brief discussion of the relation between corporate governance in the United States and that in other countries, an issue that is receiving greater attention as markets become more global.

As empirical research has evolved, its focus has shifted to add richness and depth to the understanding that economists now possess of how good corporate governance can promote investors' interests, corporate efficiency, and economic efficiency more generally. Two decades ago, empirical economic research into corporate governance focused on how and whether the entrenchment of managers might lead corporations to change their internal governance practices and structures in ways that might benefit the managers at undue expense to shareholders. More recently, as markets have become more global, research has

turned to the differences between countries' systems of corporate governance and whether those differences have grown or diminished in recent years.

These shifts in focus reflect the evolution of markets and the demands they place on researchers to provide practical insights and, in some instances, guidance. The result has been an increase in the scope and depth of economists' understanding of how corporate governance systems build on the foundation that markets and the law provide, as indicated by the discussion below of some legal rules that appear to undermine the effectiveness of U.S. corporate governance. Specifically, regulations that may once have had a beneficial effect now appear to place undue restrictions on investors in their ownership of stock and their exercise of the rights attached to ownership. As a related matter, some rules that seek to influence the ability of small investors to obtain information appear to rest on an incomplete understanding of the production and distribution of information, particularly as it affects small investors. The emergence of economic research on the role of information and on the economic foundations of corporate governance has complemented the development of corporate governance policy both in the private sector and in government.

Foundations of Corporate Governance

Businesses that organize themselves as corporations are better able than other kinds of businesses to raise capital from outside investors. This advantage is supported by corporate law, which allows individuals and organizations to invest in a corporation without incurring unlimited liability for the corporation's actions or bearing the costs of participating directly in its management, in order to share in the business's profits. Limited liability also accounts for the ease with which stock can be traded. When stock is bought and sold, voting rights typically change hands, and this causes market forces to affect the outcomes of shareholder votes in ways that do not apply to other kinds of elections. This transferability of rights distinguishes the voting rights of stockholders from those of citizens.

Yet strong legal institutions cannot alone account for the success that the corporation has enjoyed as an organizational form in the United States. When investors supply external financing, they delegate key decisions about the use of those funds to managers. The cost of this separation of ownership from control can be high, to the point of limiting a corporation's profitable access to outside financing. Even very detailed provisions in laws and contracts cannot realistically eliminate this cost: closing all the relevant loopholes in those provisions, updating them to keep up with changes in market conditions and technology, and enforcing them against violation would be prohibitively costly.

Accordingly, managers and investors can have powerful incentives to discover or invent other ways to reduce these remaining costs of separating ownership from control, for if they succeed, the corporation can grow and investors can participate in the resulting higher profits. However, these costs can vary markedly across corporations and industries and over time. This creates incentives for managers and investors to monitor existing solutions and continue to seek new means of reducing the costs of separating ownership from control.

It is here that the three-part foundation of corporate governance in the United States becomes important. The first part comprises the external markets that put pressure on managers to perform, bringing their incentives more closely into alignment with the shareholders' interest and creating incentives for them to develop new strategic or institutional means of reducing the costs of separating ownership from control. The second is the internal governance structure of the corporation, which adds a complementary set of rules and incentives to align management's actions with the shareholders' interests. Finally, the legal system provides investors and other participants in the corporation's affairs with a means of impartial dispute resolution. Related to this is the role that regulation plays in shaping corporate governance solutions. Some features of contemporary corporate governance may indeed be built upon preexisting regulations or other legal rules. The opposite may also be true, however: some contemporary features of U.S. corporate governance predate modern securities regulation. Market, legal, and regulatory solutions interact and can complement one another in aligning the incentives of managers and the interests of shareholders.

Market-Imposed Discipline: External Governance Mechanisms

The market institutions that have emerged in the United States to align managers' and investors' interests tend to complement the legal discipline that the courts provide. They do this by overlaying a more flexible yet fairly standardized system of checks and balances onto the more rigid system of court-enforced rules and laws.

As U.S. corporate governance has evolved since the mid-20th century, experts in economics, finance, and law initiated extensive study of how the sometimes-hidden forces of the marketplace operate on the corporation. The result is that competition in at least three distinct external markets is now recognized as shaping the governance structures of corporations:

- Competition in the market for corporate control
- Labor market competition
- Product market competition.

Box 2-1. Do Bad Bidders Make Good Targets?

During the 1980s, interest grew in the use of hostile and friendly takeovers as means of disciplining bad management and of helping to reallocate management and other resources among competing uses. Research on this topic indicated that takeovers have favorable or at worst neutral consequences for shareholders, on average. Yet some bidders paid higher prices than others. This raised questions about whether the disciplinary reach of the market for corporate control might extend to corporations whose managers bid for other firms too aggressively. The evidence is that corporations whose shareholders appear most likely to have been harmed by their managers' overly aggressive acquisitions are indeed more likely to become acquisition targets themselves. After a completed acquisition, managers appear to face a greater chance of being replaced. Moreover, managers of targeted corporations often face market discipline whether or not the takeover bid succeeds. Takeover targets are often poor performers, and management turnover appears to occur more frequently after the defeat of a takeover bid if the target is a poorly performing corporation.

Merger and acquisition activity can in some instances strengthen corporate governance by committing the corporation to the issuance of more debt, ensuring the payout of free cash flow and closer monitoring by debtholders. Although research from other countries, such as Japan, indicates that there, too, the threat of takeover can strengthen managers' incentives to act in the shareholders' interest, evidence of a well-functioning market for corporate control has been more visible in the United States. For all these reasons, economists view the market for corporate control as an important source of management discipline, complementing the beneficial effects of other market forces and regulatory oversight. Mergers and acquisitions have a useful role to play in corporate governance. In the market for corporate control, bad bidders make good targets.

Each of these sources of market discipline contributes to managers' incentives to act in the interests of shareholders. This market discipline in each instance can take the form of reputational sanctions: managers will bear losses in their own expected future income if market participants decide to revise downward their beliefs about the quality of the corporation or its managers in response to unfavorable news about their conduct.

The pressures of these distinct markets are most readily apparent at different times in different industries and corporations (Box 2-1). Striking evidence on the role of external markets in disciplining managers—and in

reallocating assets among competing uses—emerged in the 1980s, for example. During this period, changes in technology and in regulation led many corporations to substitute external financing for internal financing. This also exposed the managers of some of these corporations to the real chance of being removed, as outside investors acquired significant amounts of equity and debt. Helping in this transition was the emergence of individual investors who specialized in acquiring companies even against the express wishes of incumbent management. Many of the so-called hostile takeovers of the 1980s occurred in a few specific industries such as oil and gas. The opportunity to improve corporate performance through restructuring made many of these transactions profitable.

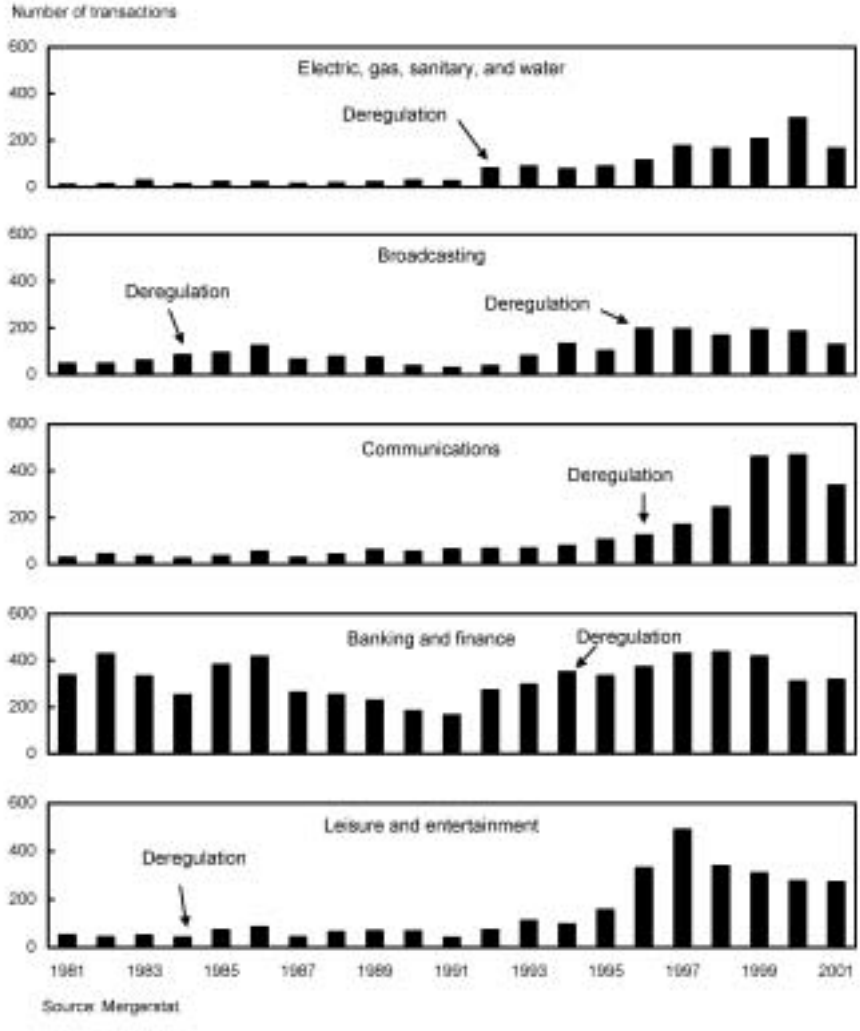
Mergers and other corporate control transactions play a valuable role in redistributing assets among alternative uses. By facilitating competition between management teams, and between organizational forms, the market for corporate control continuously affects the structure of corporations and the way managers do their jobs. Transactions in this market tend to occur in waves and to concentrate in specific industries, however, largely because the gains from corporate control transactions often derive from industry-specific technological and regulatory change, as Chart 2-1 illustrates.

Although managers continued to face pressure from the market for corporate control during the early 1990s, relatively few transactions occurred, as data on tender offers in Chart 2-2 illustrate. Economic research at that time documented some of the other external market forces and internal governance mechanisms that help align managers' incentives with the shareholders' interest. Evidence on CEO turnover illustrates the contribution of the labor market toward this alignment.

Managers face the threat that poor performance will cost them their jobs, independent of the level of activity in the market for corporate control. Research from the late 1980s and early 1990s indicates that CEOs were significantly more likely to lose their jobs following poor performance of their firms than at other times—a reflection of market discipline, in this case labor market discipline. Board members of companies that violated financial reporting rules also appear to suffer losses. The number of other directorships held by its directors appears to decline significantly after a firm is charged with accounting fraud. Indeed, evidence from a recent study suggests that individual employees often lose their jobs after their contributions to corporate misconduct become known. All of this illustrates the practical importance of the labor market as a source of discipline on management's performance, apart from the market for corporate control.

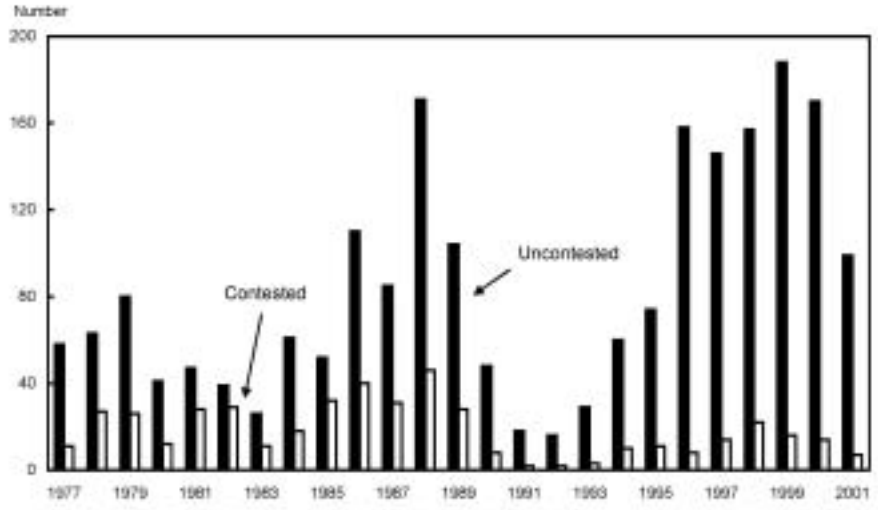
Finally, product markets are an important source of discipline for managers, with a lasting and pervasive effect on the conduct of business of all sizes. If corporations fail to deliver goods and services of suitable quality at a competitive

Chart 2-1 **Merger and Acquisition Transactions by Industry, with Deregulation**
Corporate control transactions often occur in waves after regulatory and technological change, such as occurred during the 1990s.



price, consumers will not buy from them. This gives managers powerful incentives to put their efforts into marketing good-quality products at reasonable prices. Product market competition is so critical to the performance of corporations that laws have been passed and remain vigorously enforced to prevent it from being extinguished by collusion or merger. In fact, product markets can in some instances provide discipline against abuses by corporations against consumers, in addition to the discipline that the courts provide.

Chart 2-2 **Tender Offers**
The mid-1980s and late 1990s witnessed surges in tender offer activity. Hostile, or contested, offers were relatively more important in the 1980s. The overall level of activity was greater in the 1990s.



Note: A tender offer is an offer to the shareholders to buy their shares at above the current price, usually to obtain significant influence or control over the corporation.
Source: Mergerstat.

Internal Governance Mechanisms

External market forces shape not just management conduct but also the design of mechanisms internal to the firm. For example, to avoid being subjected to a hostile takeover or to the threat of a proxy fight, managers have integrated outside observers into their internal decision processes and have taken other steps to improve the quality of their firms' internal governance. They have also divested assets that have higher value in applications outside the corporation.

Internal features of corporate governance can be difficult to discern from outside the corporation. Were it not so, managers would not exercise as much discretion as they often do over the corporation's choices, and the agency costs of separating ownership from control would not be as high as they are. Yet a few features of internal corporate governance are strikingly visible from without. Examples include the distribution of voting rights attached to stock ownership, the relation between debt and equity in the firm's financial structure, the composition of the board of directors, and, to some extent, the compensation of managers.

All features of internal corporate governance have the potential to affect corporate efficiency. Only those features that outsiders can readily observe—and that managers cannot easily alter—directly affect outside investors' beliefs about their likely returns from investing in the corporation. Debt finance provides one example. By taking on a significant amount of debt,

such as bank debt, managers can publicly commit to having a reputable lender monitor the conduct of their business more closely and more often than might otherwise occur.

The attachment of voting rights to stock provides a means of influencing the actions of management that is independent of any debt that may exist. The distribution of voting rights among shareholders is indeed important to internal governance, as are the rules governing how and on what issues shares may be voted. By exercising their voting rights, shareholders ratify managers' choices about some of the more transparent features of internal corporate governance, such as the composition of the board. Shareholders' exercise of their voting power became a focus of economic research during the 1990s, following changes in State laws that appeared to make it more difficult for individual large shareholders to unseat ineffective managers. This period saw growing demand from institutional investors for guidance on how best to exercise voting rights held as fiduciaries.

Shareholders: Ownership and Control

When a corporation decides to go public, its current investors must decide what ownership and control rights to retain for themselves and what to offer for sale to new investors. Going public can, of course, generate substantial agency costs related to separating ownership from control. Prospective new investors anticipate these potentially high costs. Their willingness to acquire stock as part of a new issue accordingly reflects the quality of the steps taken by the incumbent owner-managers to commit the corporation to a strong system of internal governance. Research suggests that the value of such a system is far greater in those industries, and under those market conditions, where the costs to outsiders of monitoring the actions of management are relatively high.

One way for the incumbent owner-managers to make a commitment to good governance is to retain a large fraction of the corporation's stock. The effect is to increase the sensitivity of the managers' own wealth to changes in the wealth of shareholders. Because the incumbent management has greater control over the firm's decisions than do other shareholders, the effect of increased managerial ownership is to bring the incentives of management, and thus the actions of the corporation, more closely into alignment with the shareholders' interest (Box 2-2).

Observed differences in the concentration of management's stock ownership across companies indeed appear traceable to differences in the costs of eliminating barriers to external influence, and the value of doing so. Managers possess relatively large ownership stakes, on average, in corporations that operate in volatile markets or in industries where management's discretionary actions affect shareholder wealth yet are difficult for outsiders to observe and evaluate. They tend to possess relatively small ownership

Box 2-2. Who Owns Corporations?

In the United States, a corporation's stockholders are its ultimate owners. Possession of common stock and related equity securities confers two fundamental rights of ownership: the right to participate in the corporation's future profits and the right to vote on certain decisions of the corporation, such as the appointment of directors. Stockholders learn what issues are up for a vote by reading the proxy statement that they receive by mail before each shareholders' meeting. Meetings usually occur annually. These rights are established by State law and reinforced by Federal laws and regulations, such as disclosure laws, that obligate corporations to keep current and prospective future shareholders informed.

Well-developed financial markets have allowed U.S. public corporations to distribute their stock widely. Already in the 1930s, concern arose that the diffuse ownership of U.S. public corporations might undermine their efficiency. One study famously expressed the view that professional managers lacked adequate incentives to serve the shareholders' interest, and that shareholders with small ownership stakes had little incentive or ability to monitor and, when necessary, intervene to correct the situation. Fifty years later, research into the market forces and other mechanisms that guide managers' actions intensified. This work revealed that top-level managers of large public corporations owned significant blocks of stock in their firms.

Indeed, management ownership of stock in U.S. public corporations appears to have increased since the 1930s. One study reports that the proportion of shares owned by managers of public corporations actually grew between 1935 and 1995, from an average of 12.9 percent to an average of 21.1 percent. This increase appears to have occurred between the 1930s and 1970s: little change occurred between 1980 and 2001, according to recent research.

Consistent with the incentive-aligning value of stock ownership, management's ownership stake is typically smaller in companies where management discretion plays a less critical role and where external oversight is less costly or easier to achieve—this is the case in static or low-volatility market environments and in heavily regulated industries. Managers' ownership of stock in companies in the utilities industry and other regulated industries is less concentrated than it is in other industries, on average, and this pattern was present in both 1935 and 1995. This evidence is consistent with the views of many economists that an important function of management ownership of stock is to reduce the cost of separating ownership from control by aligning management's incentives more closely with the investors' interest in ways that outsider investors can readily observe.

stakes in corporations that operate in less volatile markets and in regulated industries where managerial discretion matters less to shareholder wealth. This suggests that management's stock ownership responds at least in part to the market's demand for an appropriate alignment between managers' incentives and shareholders' interests.

One alternative to concentrated managerial stock ownership is for one or more investors who are not managers to accumulate a significant block of shares. Corporations that have such outside blockholders can be easier to acquire, because some of the transactions costs of concentrating ownership in the hands of one or a few investors have already been borne. The presence of a large blockholder can thus increase management's risk of ouster due to poor performance. This can in turn deter shirking and other bad management practices, even if the blockholder does not directly exercise his or her rights of influence or control.

Blockholders who own voting stock in the corporation can, of course, influence the strategy or management of the corporation directly, by exercising their voting rights. Blockholders have greater abilities and incentives to exercise these rights than do smaller shareholders, for two reasons. First, ownership of more voting rights in the corporation gives each blockholder a greater chance of influencing the outcome of any shareholder vote or related decision. Second, the entitlement to a greater share of the corporation's future cash flows that comes with block ownership can make it significantly more profitable for an outside blockholder to incur the upfront costs of seeking to influence the outcome of a vote or other corporate decision. These features indicate that the presence of outside blockholders can significantly affect the quality of discipline that managers receive from the market, and the quality of corporate governance generally.

Research on corporate blockholders has considered the possibility that they, like managers, might have idiosyncratic interests that conflict with the interests of shareholders generally. Concerns that large investors might treat themselves preferentially have arisen in the context of research into the source of the premium at which voting stock tends to trade over other, nonvoting stock, for example. The many different kinds of outside investors that appear to exist and the nature of their incentives remain to be fully explored by economic research.

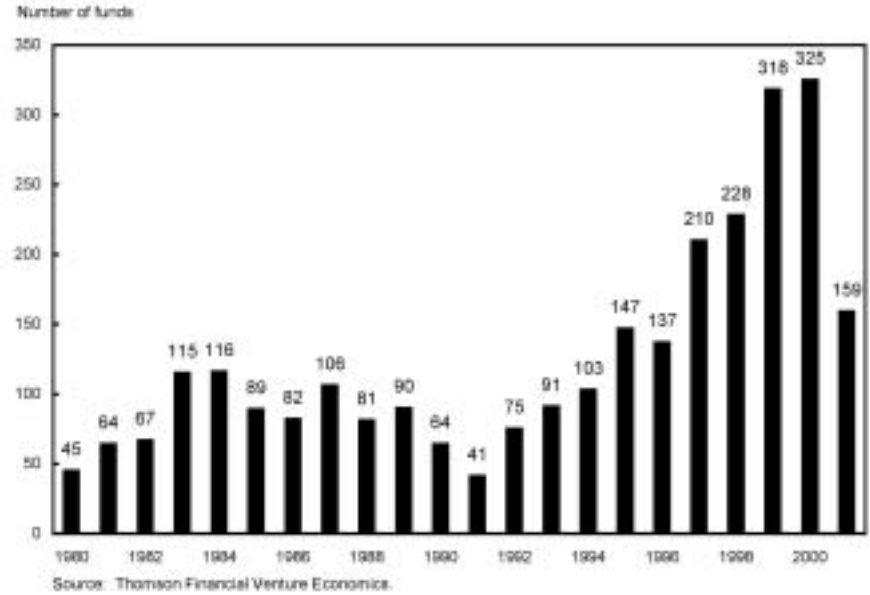
Suppliers of Venture Capital

Venture capitalists differ from some other stockholders in that they tend to follow a dual strategy, acquiring large ownership stakes while also participating actively in the governance of the corporation. Their large stakes can allow them to capture enough of whatever gains accrue from their intervention to cover the high cost of the effort that successful intervention can

require. Venture capital investors play a greater role in corporate governance in countries, such as the United States, where stock markets are relatively well developed. The presence of such markets makes it easier for venture capitalists eventually to sell their stakes to other investors who wish to own smaller stakes and be less involved in the strategic or the day-to-day decisions of the corporation. The emerging corporations that make the best use of venture capital firms' resources tend to be relatively risky, with high rates of failure. Thus, when venture capital investments succeed, the returns can be very high, even though the expected return on any individual investment may be relatively low. Chart 2-3 illustrates changes in the level of venture capital activity that have occurred over time in response to shifts in the demand for the financing and expertise they bring to emerging businesses.

Recent studies indeed call attention to venture capital as a good source of financing for corporations that face especially great difficulty in credibly communicating their businesses' future prospects to potential investors. Such corporations include those whose value derives primarily from future growth opportunities and those that have difficulty obtaining loans because they cannot readily meet the collateral and other requirements of banks or other lenders. Rather than try to satisfy a prospective lender, such firms often concentrate equity ownership with the entrepreneur and a venture capitalist. This may pave the way for some dispersed outside equity ownership.

Chart 2-3 **Net New Venture Capital Funds**
Opportunities for profitable creation of new venture capital funds arose during the 1990s.



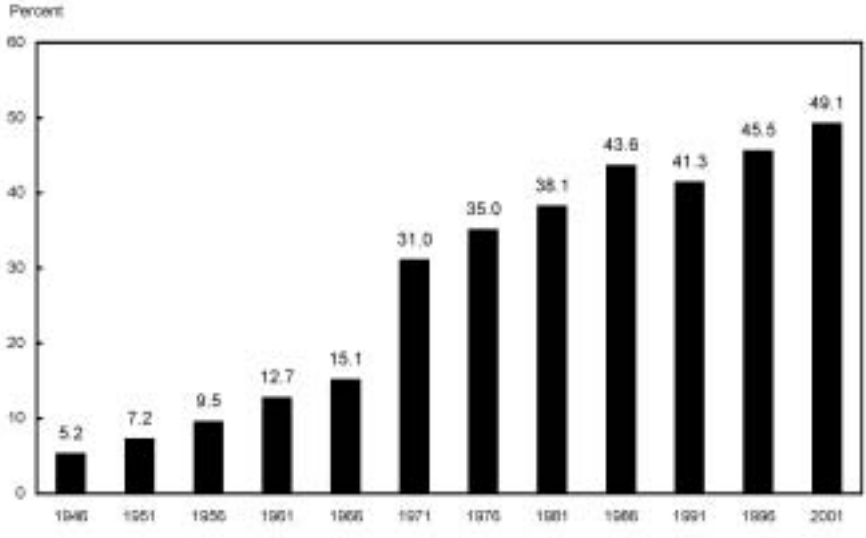
Source: Thomson Financial Venture Economics.

Institutional Investors

The ability of shareholders other than managers to exercise their voting rights in the firm can also play an effective role in aligning management's actions with the shareholders' interest. During the 1970s and 1980s, institutional investors accumulated equity stakes in U.S. corporations of a size not seen in the last half-century, as Chart 2-4 illustrates. As their ownership has grown, so has the visible role of institutional investors in corporations. In the 1980s these institutions—which include pension funds, mutual funds, and insurance companies—were often seen as passive participants in corporate governance, and evidence supports this view. This changed during the 1990s. Yet constraints on the role of institutional ownership have remained.

For example, the Investment Company Act of 1940 substantially restricts the ability of institutions to discipline corporate management on behalf of households and other investors. These restrictions appear to have arisen from a desire to promote the diversification of institutional holdings and to limit institutions' influence over corporate management. Modern economic research, however, has clarified the conditions that must prevail for diversification to be adequate. It appears that the Investment Company Act's notion of diversification would not stand up to modern economic theory: the act requires excessive diffusion of funds across firms without ensuring true diversification. For example, a mutual fund that invests all its assets across a large

Chart 2-4 **Percent of Equity Held by Institutions**
Institutional participation in corporate stock ownership has grown significantly over the past decade, and is nearly quadruple the level of 40 years ago, before regulatory change led to dramatic expansion.



Source: Board of Governors of the Federal Reserve System.

number of software companies would conform to the letter of the act but would not actually be diversified. The act may thus impose costs on investors—and on modern corporate governance—without providing countervailing benefits to investors or to the functioning of the market generally.

Research has also brought to light the critical role that the prospect of shareholder intervention in the corporation's affairs can play in disciplining management. This valuable discipline can often be achieved without actual intervention, the necessary condition being that managers recognize the threat of intervention. The Investment Company Act assures managers that the ability of institutions to step in and take direct disciplinary action against any misconduct will be limited. It thereby limits both the direct and the indirect roles of institutions in aligning the actions of corporate managers with the shareholders' interest. (Table 2-2 reviews other legal constraints on the role of institutional investors.)

Boards of Directors: Insiders and Outsiders

One way for managers to commit to a closer alignment between their incentives and the interests of their shareholders is to publicly surround themselves with reputable advisers. They can accomplish this by appointing to their boards of directors persons known for speaking out in the boardroom and, if necessary, taking action to prevent or remedy managerial misconduct. Boards serve two important roles. First, they constitute a panel of knowledgeable people who can offer the CEO timely advice in response to unforeseen developments in the marketplace that the CEO or other managers may be ill equipped to address on their own. Second, they can review the quality of recommendations that the CEO receives from other members of the corporation's management. An important challenge in the ongoing evolution of U.S. corporate governance is to find ways of improving the quality of the commitment that directors themselves make to act diligently in the shareholders' interest.

This challenge had already attracted the attention of researchers even before the events of last year put the issue on the front pages. Because boards of different companies differ in their composition, researchers have been able to evaluate statistically whether corporations with certain kinds of boards tend to perform better or worse than others. The evidence from this research is instructive, although not as consistent in its findings as the evidence on the incentive-aligning role of insider ownership.

One finding of this research is that directors who are not employees of the corporation may be less susceptible to the internal pressures that can undermine managers' incentives to act in the shareholders' interest. Research into what drives CEO turnover, for example, shows that outsider-dominated boards more frequently terminate CEOs following poor corporate performance than do insider-dominated boards (Box 2-3). Other research tells a

TABLE 2-2.—*Legal Rules That Shape the Roles of Institutional Investors*

Institution	Restriction	Source
Insurers		State law (New York example)
Life insurers	• No more than 2 percent of assets may be in the common stock of a single company; no more than 20 percent of assets may be in equity interests.	NY Insurance Law (for insurers doing business in NY)
Property and casualty insurers	• No more than 2 percent of assets may be in a single company's preferred or guaranteed stock; at most, 10 percent of assets may be in common stock.	Same
Mutual funds	• For half of portfolio: no more than 5 percent of fund's assets may go into stock of any one issuer, and fund may not purchase more than 10 percent of voting stock of any company; otherwise tax penalties apply. • Must get SEC approval prior to joint action with affiliate; e.g., a fund needs SEC approval before acting jointly to control a company of which it and its partner own more than 5 percent.	Subchapter M of the Internal Revenue Code Investment Company Act of 1940
Pensions	• Must manage assets prudently, and generally assets must be diversified. (The "prudence rule" has been interpreted to require that a person responsible for a plan retain experts when appropriate, and is a significantly higher standard than the business judgment rule). • Must act for the exclusive purpose of providing benefits to participants and beneficiaries. • Traditional pension plans may not acquire any stock or bonds issued by the company that sponsors the plan if such acquisition would cause the plan to hold more than 10 percent of its assets in such securities. • Must also comply with supplemental rules that specifically prohibit potentially abusive transactions with the plan.	ERISA: 29 U.S.C. § 1104 (a)(1)(B) 29 U.S.C. § 1104 (a)(1)(C) 29 U.S.C. § 1104 (a)(1)(A) 29 U.S.C. § 1107 (a)(2) 29 U.S.C. § 1106 (a); 1106 (b)
Bank holding companies (BHC)	Generally cannot acquire direct or indirect ownership or control of any voting shares of any company that is not a bank. Several important exceptions exist which, for example, permit a BHC to hold shares of a company: • That do not exceed 5 percent of the company's outstanding shares, if the ownership does not constitute "control" • Engaged in activities closely related to banking.	Bank Holding Company Act of 1956 12 U.S.C. § 1843(c)(6) 12 U.S.C. § 1843(c)(8)
Bank trust funds	• For pension accounts, no more than 10 percent of assets may be in employer securities. • Active bank control could trigger liability to controlled company.	ERISA: 29 U.S.C. § 1107 (a)(2) Bankruptcy case law

Sources: United States Code, Department of Labor, Federal Deposit Insurance Corporation, Securities and Exchange Commission, and National Association of Insurance Commissioners.

similar story. Firms facing SEC enforcement actions tend to have fewer outsiders on their boards, according to another study. The appointment of outside directors also has been associated with stock price increases, even among companies whose boards are already outsider-dominated, although companies with more outsiders on their boards appear not to perform significantly better than other companies, on average. Evidence that outside directors affect corporate conduct includes one study's finding that banks with more outside directors during the 1920s provided higher quality underwriting services, and that investors recognized this: banks with more outside directors were found to obtain higher prices than other banks for the securities they underwrote. These findings are consistent with the view that insider-dominated boards face some of the same incentive conflicts that can diminish the incentives of the CEO and other managers to act in the shareholders' interest.

It would be premature, however, to conclude that shareholders always benefit from adding outside directors, or that maintaining an outsider-dominated board is good for shareholders in all corporations. Studies of the benefits to shareholders of having outside directors sit on corporate boards have not consistently demonstrated that their presence improves shareholder wealth. These mixed results may occur because the effects vary from one

Box 2-3. What Incentives Do CEOs Face?

Two important incentives for CEOs to act in shareholders' interests come from the labor market and from the provision of incentive-based compensation. The role of the labor market is apparent in the fact that CEOs often lose their jobs after their corporations perform poorly: one study found that departure rates for CEOs at firms with poor performance relative to their industry exceeded those at firms with good performance in all but 3 of 26 years studied. Actual CEO firings can be difficult to identify, given that underperforming firms tend to quietly encourage their CEO to leave rather than make a public spectacle of the event. Nevertheless, proxies for dismissal—such as measures of departure rates that exclude departures that were likely due to retirement—indicate that job loss is a powerful disciplinary mechanism for CEOs in poorly performing companies. For example, one group of researchers found that executives in poorly performing companies tend to depart at younger ages: 34 percent of CEOs at such companies left before age 60, compared with only 24 percent of CEOs at better performing companies. Finally, one would expect underperforming firms to be more likely to look outside the company in order to break with the poor management practices of the past. Consistent with this, research that used press reports to qualify departures as either forced

Box 2-3.—*continued*

or voluntary found that outsiders replaced 49.6 percent of CEOs who had been forced from their positions, but only 9.9 percent of those who had departed voluntarily.

This practice of terminating CEOs following poor corporate performance appears to have stronger incentive effects on young CEOs than on older CEOs who are nearer retirement. This is not surprising: young CEOs have more future compensation to lose. Corporations appear to compensate for this. Older CEOs receive pay that is more sensitive to corporate performance than do younger CEOs, on average. One study associates a 10 percent change in shareholder wealth with a 1.7 percent change in compensation for CEOs within 3 years of retirement, but only a 1.3 percent change for those more than 3 years from retirement, for example. The threat of job loss and the provision of performance-based pay thus appear to be substitute means of providing CEOs with incentives to act in the shareholders' interest.

Stock ownership also helps align CEO incentives with the shareholders' interest. It enables the CEO to participate in any improvement in shareholder wealth that may arise from his or her performance, and it compels him or her to share in any losses. Options similarly allow the shareholder to participate in the gain, yet with limited exposure to downside risk. Options became an important part of executive pay during the 1990s and thus have received special attention during recent efforts at corporate governance reform. As a form of long-term compensation, options have some attractive features. Unlike traditional bonus packages, which depend on accounting-based measures of profits and corporate performance, the compensation that a CEO or other manager receives from options depends on the market's appraisal of the corporation's performance. This is reflected in the price of the corporation's stock. Specifically, stock options give the holder the right to buy stock at a set price. When the market price of the stock rises above that price, the option's value to the holder also rises. Option-based compensation, like restricted stock grants, can thus allow CEOs and other officers to participate in the growth in shareholder value that occurs during their tenure.

In addition to helping to align the CEO's incentives with the shareholders' interest, incentive-based compensation can be a good way to attract high-quality managers, because it rewards talent and effort. Research on compensation by U.S. banks, for example, reveals that compensation of bank CEOs tends to be both higher and more sensitive to changes in profits in States where deregulation has occurred; managerial discretion is arguably more important in such States, which appears to explain the difference in compensation patterns.

corporation to the next, for example because market conditions are different for different corporations. Moreover, it can be difficult for shareholders to identify the incentives that each outside director brings to the corporation.

To summarize, corporations have sought in several ways to improve the quality of their board's commitment to serving the shareholders' interest. They have added members to their boards who neither are employees nor have other business dealings with the corporation—such relationships can create conflicts of interest and otherwise undermine directors' incentives to oppose an entrenched or ineffective management team. The supply of qualified independent directors is limited, however, and their quality may vary; therefore this strategy is not likely to come without a cost. One way to avoid unduly trading off quality for independence is to change the procedures that the board follows, rather than its membership. Boards have tried various procedural solutions in an effort to improve the quality of their commitment to shareholders. One is to appoint someone other than the CEO to be the chairman of the board. Another is to change directors' committee assignments so that more outside directors are appointed to committees that make such critical decisions as the setting of CEO compensation and the selection of the corporation's outside auditor.

An alternative strategy would be to enlist an outside organization (for example, a stock exchange or a government regulator) to monitor certain specific aspects of the firm's internal governance. This shifts some of the burden of monitoring from the board—and from shareholders generally—onto the outside organization. Yet this strategy, too, has its limitations. Many of the challenges of designing effective internal governance systems arise from the fact that it is costly to monitor managers' actions in a timely manner from outside the corporation. Outside organizations can face many of the same obstacles that boards can face in making and enforcing rules to ensure good management.

Legal and Regulatory Institutions

Strong legal institutions are widely recognized as providing a solid foundation for economic growth, including the emergence of a strong corporate sector. Their contribution is seen as twofold. First, solid legal institutions provide a reliable, impartial means of resolving disputes. Although parties sometimes rely on private means of dispute resolution, such as arbitration, the reliable supply of dispute resolution through the courts remains a valuable, if not critical, input to effective corporate governance. Courts have indeed been called upon to enforce shareholders' voting rights, including the right of individual large shareholders to obtain internal governance reforms, such as changes in board composition, that may benefit shareholders generally at the expense of incumbent management.

The second contribution of legal institutions is regulation. Securities regulation in the United States predates the 1930s. Its evolution accelerated rapidly, however, after the passage of the Securities Act of 1933 and the Securities Exchange Act of 1934, which created the SEC and delegated to it the task of writing and enforcing securities regulations. The Congress similarly authorized the SEC to delegate some, but not all, of this task to specialized institutions. Stock exchanges, such as the New York Stock Exchange (NYSE), operate under SEC oversight as self-regulatory organizations. The SEC has also delegated certain responsibilities for setting and maintaining accounting standards to the Financial Accounting Standards Board. Under the Sarbanes-Oxley Act, the SEC is overseeing the creation of a new organization, the Public Company Accounting Oversight Board, whose task will be to develop, maintain, and enforce the standards that guide auditors in their monitoring and certification of corporate financial reports. An extensive set of laws and regulations has thus arisen to supplement and complement the role of the market in shaping corporate conduct. Like private contracts, these rules are enforceable through the courts (Box 2-4).

Information and Disclosure

The central feature of modern U.S. securities regulation is the series of SEC-enforced rules under which market participants must disclose information to the public. Reflecting this fact, the Securities Act of 1933 is sometimes known as the "truth in securities law." To the extent that investors have good information, they can fine-tune their investment decisions, shifting capital to those corporations that offer more or less risky investment opportunities, depending on their risk preferences. Better availability of information allows corporations whose managers do a good job or that offer low-risk investment opportunities to gain access to capital at a lower price than other, lower quality corporations or those whose offerings are relatively more risky.

In requiring disclosure, securities regulations supplement both the law and the market forces that create incentives for corporations to keep investors informed. Corporate managers have incentives to supply favorable information because, in doing so, they can distinguish themselves from other managers who lack favorable information to report. Enforcement of anti-fraud laws can beneficially strengthen this signal. Managers and corporations that commit fraud also risk costly market sanctions and loss of reputation, in addition to any court-imposed sanctions.

Examples: Does it Matter How Investors Get Information?

Controversy often surrounds regulations that seek to control the production and distribution of information. Regulation of information in securities markets is no exception. For example, the question of whether SEC-enforced

Box 2-4. Markets, Accountability, and the Enforcement of Rules

The announcement of a court-imposed sanction can be a dramatic event, particularly when it is for commission of a white-collar crime such as the intentional and harmful dumping of toxic substances, or fraud against a customer or investor. Yet the most important effects of the court system are hidden. Court-enforced sanctions shape management conduct by creating a credible threat to impose punishment, much as the threat of being pulled over for violating the traffic laws shapes the conduct of drivers on the road. Good managers, like good drivers, follow certain principles of conduct not only because they are good people but also because they know that, if they do otherwise, they risk being detected by enforcement authorities and subjected to sanctions. There are indeed two different ways to discourage—or deter—people from committing offenses, according to economists. One is to step up detection efforts, so that offenders face higher probabilities of sanction. The other is to increase the total sanction that offenders receive upon detection. The level of deterrence depends on the would-be offender's expected sanction—the product of the probability of detection and the size of the total sanction.

The total sanction that corporations—and managers—receive for detected misconduct depends not just on the courts but also on the market's reaction to the news of misconduct. For example, corporations can bear significant market, or reputational, sanctions for fraud against customers or suppliers, as when news of fraud against one or a few customers leads other customers to take their business elsewhere, possibly driving the offending corporation into insolvency. The size of the court sanction necessary to generate a given total sanction—and, thus, the level of deterrence—is of course higher for offenders and offenses where no market sanction is present. Two types of offenses for which market sanctions on the corporation appear not to be good substitutes for court sanctions are environmental offenses that harm third parties and frauds committed by managers against shareholders.

Whatever the source and size of the total sanction, deterrence depends on managers or employees who are in a position to influence corporate conduct believing that they will be held accountable for any harms that arise from misconduct, should it occur, with a high enough probability to deter the offense. Accordingly, recent reforms highlight the importance of clarifying management accountability and putting more resources into enforcement. Accountability and diligent enforcement are necessary for laws and regulations to do their work of promoting good corporate governance. Economic research has drawn attention to the fact that the effectiveness of rules generally depends on the effort put into their enforcement, in addition to the size of the penalty.

disclosure rules actually improve the quality of information that investors receive remains a subject of debate among researchers almost 70 years after the SEC's creation. One study of the effects of disclosure regulations made use of the fact that, although access to information was not as good in 1933 as it is now, investors did have better access in those days to information about corporations whose stock had been traded for many years or was traded over the NYSE than about other firms. If the new disclosure regulations implemented under the 1933 act had any effect, one would expect that effect to be greater for new, unseasoned securities and for securities of corporations that were traded over the smaller, regional exchanges, which lacked the strong listing standards and the following of brokers and investment advisers that the NYSE had by then accumulated. That study, which examined the effects of initial disclosure requirements under the 1933 act, concluded that there was such an effect: the act's passage contributed to a significant decline in the dispersion of securities prices, particularly among unseasoned non-NYSE securities.

A growing number of federally mandated disclosure rules have been issued over the decades since passage of the 1933 act. During the 1970s and 1980s, economists intensively examined the role of information in financial markets. They came to understand that information is a kind of commodity: it is costly to produce and has value to those who possess it. Modern economic research on the effects of disclosure regulation accordingly considers not just the effect of requiring disclosure on whatever information is produced, but also how the requirement to disclose information affects the *incentive* to produce information. Contemporary research on the effects of disclosure regulations thus focuses on how those rules affect the net quality, or value, of information produced.

The Williams Act of 1968. Evidence on the effect of the 1968 Williams Act amendments to the Securities Exchange Act of 1934 provides a good illustration of how disclosure regulations can have unintended, adverse consequences that offset and potentially cancel out the benefit they are designed to confer. During the 1960s, concerns arose that, in corporate takeover attempts, shareholders were being pressured to sell, or tender, their shares without being given enough time or information to make an informed decision. To address these concerns, the Williams Act introduced regulations under which acquirers today must disclose certain information, such as their intention with regard to the target company, within 10 days of obtaining 5 percent of any class of a company's voting securities. This can enable investors to do a better job of selecting the acquirer from among the alternatives, conditional on any acquirer making an offer.

Yet research into the consequences of the Williams Act uncovered a more subtle effect through which the act makes investors worse off. By requiring disclosure and delay, the Williams Act reduces the value of searching for

socially valuable acquisition prospects. It does this by enabling others to free-ride on an innovative acquisition bid, tendering their own offers and thereby raising the price that the innovator must pay and reducing its share of the total value of the acquisition. This is reflected in the increased premium that acquirers paid to the shareholders of target firms after passage of the act: from 32 to 53 percent of the pre-offer stock price, on average, over the ensuing decade. (Related State laws accounted for an additional increase: from 53 to 73 percent of the pre-bid price.) Moreover, these increased premiums appear to have come at the cost of a reduced supply of takeover bids, as some (but clearly not all) prospective bidders shifted their resources to other pursuits. Some shareholders thus appear to have benefited at the expense of others: those who still received bids after the act was passed got larger gains than they would have otherwise, yet those who did not receive bids that would have been offered had the act not been passed got nothing, and a valuable source of market discipline was lost.

Financial Analysts' Reports. Most recently, regulators have confronted the fact that some investors—including small investors—receive information about corporations from financial analysts' reports. Given the extensive disclosure requirements that corporations already face, it might seem surprising that analysts' reports could have anything new and informative to offer. Research into how stock prices respond to the release of those reports, however, suggests that they are informative. Stock prices tend to increase when analysts issue new "buy" recommendations or raise their ratings of corporations, and decline when analysts issue new "sell" recommendations or lower their ratings.

Concerns have been raised that some analysts may face conflicts of interest that could lead to biases in their reports. Conflicts can arise when an analyst is writing a report on a firm that has done a significant amount of business with the analyst's employer or that faces the strong prospect of doing so in the future. Research suggests that investors tend to take analysts' affiliations into account when deciding how to use the information in their reports: investors appear to place less weight on reports of analysts whose employers may present them with these conflicts. How and to what extent investors take into account the potential for conflicts when evaluating analysts' reports—and the corporate governance context in which analysts prepare their reports—is an important area of ongoing research. The findings are expected to shed light on the appropriate direction for corporate governance reform as it affects the supply of information to investors.

Corporate Governance Reform

One of the perennial challenges of running a business is adapting to change. As businesses have grown in size and complexity, this challenge has grown as well. To keep up with changes in the marketplace, corporate participants—including both managers and investors—must confront the demands associated with new technology, changing consumer preferences, and the requirements of the public sector. As technology and changes in the structure of markets in Europe and elsewhere have made it easier to trade across international boundaries, new challenges have emerged. Some of these developments have placed U.S. corporations and the laws and regulations governing them under relatively close scrutiny over the past decade, as other governments have turned to the successful U.S. corporate governance system as a possible template for creating new systems or modifying old ones. The ability of U.S. corporations to adapt readily to change is critical to their profitability and, accordingly, their ability to continue operating as independent enterprises.

The recent reforms of the U.S. corporate governance system are indeed the latest in a history of dramatic changes going back over a century. These include changes arising from five distinct merger waves (including those of the 1980s and 1990s), from the introduction of the SEC in 1934, from the imposition of constraints on institutional stock ownership through the Investment Company Act of 1940 and other legislation, and from the continuing modification of regulations under the securities laws.

The recent reforms were marked by a speech by the President on March 7, 2002. The President announced a "Ten-Point Plan to Improve Corporate Responsibility and Protect America's Shareholders," calling for a concerted response to the emerging news that some of the Nation's largest corporations had not truthfully reported their earnings and that this would harm investors, including employees whose pensions were invested in the company's stock. This plan applies three core principles of effective governance: accuracy and accessibility of information, management accountability, and auditor independence.

The private sector's response was almost immediate. Individual managers and investors undertook a careful reexamination of the governance practices of their corporations; the resulting changes received widespread public attention in many cases. The most visible private sector initiatives were undertaken by the self-regulatory organizations whose rules public corporations must follow as a condition for the public trading of their securities. Table 2-3 shows how some of the specific initiatives undertaken by two such organizations, the NYSE and the Nasdaq, implement the core principles underlying the President's plan for reform. The table reflects proposals that were announced between April and June of 2002 and then updated during

late 2002 and early 2003 to account for SEC-initiated regulatory changes under new Federal legislation passed during July 2002.

As regulators, self-regulatory organizations, corporations, investors, and others responded to this call for action, the President in July signed into law the Sarbanes-Oxley Act of 2002. This legislation provides the courts and Federal agencies with new tools to strengthen the ability of outside investors to verify the quality of managerial decision making. The act applies the core principles underlying the President's plan. It addresses each of the points of

TABLE 2-3.—*Some Corporate Governance Initiatives of NYSE and Nasdaq*

Principle	Initiative
Information accuracy and accessibility	NYSE and Nasdaq proposals require that listed companies publish codes of business conduct and ethics and guidelines for corporate governance. NYSE proposal further requires disclosure of board-approved exemptions.
	Nasdaq proposal requires that a press release immediately disclose a going-concern qualification in an audit opinion.
	NYSE and Nasdaq proposals require disclosure of any permissible exemptions to their corporate governance requirements by non-U.S. issuers.
Management accountability	NYSE and Nasdaq proposals require independent director approval of director nominations and of CEO compensation.
	NYSE and Nasdaq proposals require shareholder approval of all equity-based compensation programs. NYSE further disallows a broker from voting on such plans without customer instruction.
	NYSE and Nasdaq proposals require that a majority of directors be independent (except at "control" companies) and set a more stringent definition of "independence," which excludes persons with *any* financial or personal relationship with the company.
	NYSE proposal requires CEOs of all companies to certify annually that they know of no violation of NYSE governance standards.
	NYSE has ability to issue public reprimand letter for companies in violation of its governance requirements.
	Nasdaq proposal requires independent director approval of all related-party transactions.
	NYSE and Nasdaq proposals require that nonmanagement directors meet regularly without management.
Auditor independence	NYSE and Nasdaq proposals require that the audit committee have responsibility to hire and fire the auditor.
	NYSE and Nasdaq proposals require audit committee approval of all nonaudit services of auditors.
	NYSE and Nasdaq proposals entail heightened standards of independence for audit committee members in that compensation is allowed only for board or committee service.
	NYSE and Nasdaq proposals require financial literacy of all audit committee members and accounting or financial management expertise of at least one.

Sources: New York Stock Exchange (NYSE) and Nasdaq Stock Market (Nasdaq).

that plan, as Table 2-4 illustrates. In doing so, it accompanies the actions that many others have begun to take, and continue to take, to strengthen each of the key elements of a strong U.S. corporate governance system.

TABLE 2-4.— *The President's Ten-Point Plan and the Sarbanes-Oxley Act*

Principle	Ten-Point Plan	Sarbanes-Oxley
Information accuracy and accessibility	1. Each investor should have quarterly access to information needed to judge a firm's financial performance, condition, and risk.	Pro forma accounting statements must be reconciled with generally accepted accounting principles (GAAP) in company reports. Material off-balance-sheet transactions must be disclosed in company reports.
	2. Each investor should have prompt access to critical information.	Filing deadlines are accelerated.
Management accountability	3. CEOs should personally vouch for the veracity, timeliness, and fairness of their companies' public disclosures, including their financial statements.	CEOs and CFOs must verify fairness and accuracy of company reports. Individuals committing "knowing and willful" violations of this requirement are subject to 20 years in prison.
	4. CEOs and other officers should not be allowed to profit from erroneous financial statements.	Following a restatement of earnings, executives must forfeit bonuses, incentive-based compensation, and profits from stock sales for the previous year.
	5. CEOs or other officers who clearly abuse their power should lose their right to serve in any corporate leadership position.	The SEC may bar individuals from serving as officers and directors.
	6. Corporate leaders should be required to tell the public promptly whenever they buy or sell company stock for personal gain.	Management and principal stockholders must report transactions by end of second business day.
Auditor independence	7. Investors should have complete confidence in the independence and integrity of companies' auditors.	The audit committee hires and oversees accounting firms. Companies must disclose whether one member of the audit committee is a "financial expert." Auditors disclose all critical accounting practices to audit committee. Auditors may not provide any of at least eight specified services for audit clients and must obtain prior approval from the audit committee for any services provided.
	8. An independent regulatory board should ensure that the accounting profession is held to the highest ethical standards.	The Public Company Accounting Oversight Board ("the Board") is funded by accounting support fees assessed on public companies. The SEC will appoint five full-time members in consultation with the Federal Reserve Chairman and the Treasury Secretary. Only two members may be or have been certified public accounts (CPAs). The Chair may not have been a CPA for 5 years prior to service. The Board may compel information from registered accounting firms and their clients in some circumstances.
	9. The authors of accounting standards must be responsive to the needs of investors.	The Board shall include in its auditing standards the requirement that firms employ GAAP.
	10. Firms' accounting systems should be compared with best practices, not simply against minimum standards.	The auditor's report to audit committee must compare company's audit practices with the auditor's preferred treatment.

Sources: The White House and the Congress.

Information Accuracy and Accessibility

Virtually all aspects of recent corporate governance reform seek to promote investors' timely access to information about the financial performance and operations of public corporations. Better informed investors can more readily limit their exposure to losses stemming from the agency costs of separating ownership from control and can more quickly act to remove underperforming managers as warranted.

The Sarbanes-Oxley Act promotes the accuracy and timeliness of financial information in several ways. First, the act introduces new disclosure requirements. It requires that directors, officers, and principal investors disclose their transactions in company stock more quickly than before: by the end of the second day after the transaction, rather than 10 days after the close of the calendar month as previously required. This enables investors to react more quickly to the information contained in such disclosures. Indeed, more rapid disclosure strengthens the capacity of outsiders generally to act on news of insider trading. The act also requires that corporations make more information available about the quality of their internal control structures, including whether they have special ethics rules in place to guide the actions of senior financial officers, and whether their board of directors' audit committee includes any financial experts (and, if not, why not).

Financial analysts and auditors are also expressly required to make certain disclosures under the act. Each must publicly disclose to investors whether any conflicts of interest might exist to limit their independence from influences other than the desire to serve the interests of shareholders. This provides an additional check against any conflicts that might remain even after the other provisions of the act, and the other reforms accompanying the act, are taken into account.

Second, the act seeks to improve the effectiveness of the many existing U.S. securities disclosure regulations by dramatically increasing some of the sanctions for violating them. In promoting deterrence, these sanctions complement the higher probability of detection that violators face from stepped-up Federal enforcement under the Corporate Fraud Task Force. The act provides for a fourfold increase in the maximum prison term for criminal fraud—to 20 years rather than 5 years—and an even higher maximum term of 25 years for securities fraud. Both of these increases in prison terms are in addition to fines and other, nonmonetary sanctions. Recognizing that penalties cannot be imposed without evidence that a violation has occurred, the act also increases the maximum sanction for destroying documents, allowing courts to impose fines and terms of imprisonment of up to 20 years for this offense. The most severe penalties, such as imprisonment, tend to apply only to violations found to have occurred knowingly, with the stiffest sentences reserved for violations that are both knowing and willful.

Finally, the act creates new rules and institutions that are designed to shape managers' and auditors' choices concerning the accuracy and timeliness of corporate financial reporting. In doing so, the act promotes compliance with existing disclosure rules, in addition to strengthening managers' and auditors' incentives generally to act in the interests of investors. (These provisions apply the principles of management accountability and auditor independence and will be discussed in greater detail under those headings.)

Management Accountability

The second core principle of the President's plan is the promotion of management accountability. The managers of public corporations initially oversee the preparation of the financial reports that their companies file periodically under existing securities regulations. Holding them accountable for the quality of those reports can thus serve as a further check on their accuracy and completeness. Management accountability has implications beyond the quality of financial reporting, however. Managers who expect the quality of their companies' performance to become known to investors face more powerful incentives to serve the investors' interest.

The Sarbanes-Oxley Act promotes management accountability by clarifying the roles and responsibilities of various corporate officers, by introducing new sanctions for managers who fail to live up to those responsibilities, and by requiring that corporations adjust their internal governance structures so that outside investors can more readily verify the strength of management's incentive to serve the shareholders' interest. For example, the act requires that CEOs and chief financial officers (CFOs) certify the accuracy and completeness of the financial reports that their companies file periodically under existing securities regulations. The act makes it a Federal criminal offense, subject to fines of up to $1 million, to knowingly engage in false certification of these reports. In the extreme case where a CEO or CFO knowingly and intentionally provides false certification, the maximum sanction climbs to $5 million. In case this is not enough to deter false certification, CEOs and CFOs who falsely certify financial reports are also required to forfeit any bonuses, incentive compensation, or other gains that they might have received from the company during the year after the issuance of a false report.

The act also clarifies the roles and responsibilities of other corporate officers besides CEOs and CFOs. It expressly charges corporations' audit committees with responsibility for overseeing the selection and compensation of the company's outside audit firm. As already mentioned, audit committees must reveal whether any of their members are financial experts, and if not, why not. A corporation's attorneys are expressly held responsible for reporting any evidence they might receive of a violation of the act, a breach of duty, or other

violation to the chief legal counsel, to the CEO, or to the audit committee or other independent directors (if other parties appear not to respond to the information in a timely manner). This increased accountability is supported by substantial sanctions for violations of rules under the act.

Auditor Independence

The creation of a special, national board to oversee the auditing of public companies' financial reports is perhaps the most visible corporate governance reform under the Sarbanes-Oxley Act. In creating this new board, the Public Company Accounting Oversight Board, the act introduces a new check on the quality of audit services supplied to public corporations whose securities are listed on U.S. exchanges. The economic role that the board will play in overseeing public accounting companies is to strengthen the auditors' incentives to do their jobs properly and with integrity, even in the face of pressure from managers who might in some instances prefer not to accurately report their companies' performance.

Under the act, the oversight board will promote the independence of auditors in several ways. To increase the chance of detecting any future misconduct by auditors, each public accounting firm must register with the board and submit to periodic reviews of its performance. The board is given the authority to act upon any evidence of auditor misconduct by undertaking investigations. Upon registering with the board, each registered public accounting firm agrees to cooperate with the board's investigations. Such cooperation includes retaining audit work papers and other documents for a minimum of 7 years and providing those records to the board on request.

When the oversight board discovers evidence of misconduct, it has the power under the act to impose sanctions. It can impose fines on individual auditors and the auditing firms that employ them. It can also bar auditors from supplying their services to any U.S.-listed corporation, temporarily or permanently. The combined effect of this new monitoring effort and these newly instituted sanctions is to increase the expected cost of misconduct to any registered accounting firm or employee.

The act goes beyond direct oversight of auditing firms, however, to address the conditions under which external auditors are chosen and employed. First, a corporation's choice of auditor must be made by a committee of independent directors who are not employees of the company and have no relationship with it other than as directors. This provision is designed to limit the influence that managers who prepare financial reports exercise over the choice of auditor. Second, for each of its clients, the accounting firm that does the audit must periodically assign a new person as the lead audit partner on each client's account. Both of these provisions limit the opportunities for collusion between auditor and client. Finally, registered public accounting firms are no longer

permitted to sell certain services other than auditing to their audit customers. This addresses the concern that an auditor might choose to overlook problems in a company's financial reports if it believes that the company might reward it with nonaudit business. Any exceptions to these basic rules must be disclosed to investors, for example through the filing of reports by the audit committee with the SEC.

To summarize, the Sarbanes-Oxley Act applies the principle of auditor independence in two basic ways. It increases the sanctions that auditors can expect to face if they engage in misconduct, thus encouraging them to comply with certain professional standards to be set forth by the new oversight board. The act also recognizes that some forms of compliance rely on the strength of the auditor's incentive to serve the investors' interest. It strengthens this incentive by requiring that public accounting firms and their clients eliminate potential conflicts of interest by making certain fundamental and verifiable changes in their business practices.

The principle of independence is also relevant to the conduct of the oversight board. To serve as an effective monitor and enforcer of the supply of independent audit services, the board must itself be free from conflicts between the interests of investors and those of specific auditors and audit clients. Accordingly, the act requires that a majority of the board's members be drawn from outside the accounting industry: members must not have supplied audit services to any client in recent years. The requirement that exactly two of the board's five members be drawn from the accounting profession reflects a tradeoff between the value of specialized expertise and the value of independence from the possible incentive conflicts that such expertise can represent. This tradeoff is similar to that which public corporations face in selecting members for their boards of directors.

Corporate Governance and the Global Economy

The change currently taking place in U.S. corporate governance is but one wave in a sea of change internationally. This change is shaped in part by globalization, which encourages countries to adopt positive features of other systems while retaining the best features of their own. International competition fosters good corporate governance by favoring the best corporate governance systems. In many respects, private and public sector institutions in other countries are moving toward corporate governance systems that look more like that of the United States—a tribute to the merits of the U.S. system. At the same time, the U.S. Government recently lifted some of the legal rules that had previously restricted bank participation in the underwriting of equity, which has been commonplace in some other countries.

The growing similarity among different countries' systems of corporate governance has captured the attention of researchers interested in how economic and legal systems interact. Their findings illustrate the importance of market forces in shaping the institutions of corporate governance, in addition to their role in guiding the strategic and the day-to-day decisions of investors and managers. Researchers have found, for example, that European and Japanese corporations tend to have relatively concentrated ownership structures, with a relatively few persons or institutions often controlling large blocks of shares. In contrast, corporations in the United States and other common law countries, such as the United Kingdom, tend to have relatively dispersed ownership, an outcome facilitated by strong securities markets, rigorous disclosure standards, transparency, and relatively active markets for corporate control. One study found that, in the United States, only 4 of the 20 largest corporations have a single shareholder who possesses 10 percent or more of the voting rights on the board; in Germany, in contrast, 13 of the 20 largest corporations have such a shareholder. Yet these differences are shrinking. Both the value of outstanding stock as a percentage of GDP and the value of equity raised through initial public offerings as a percentage of GDP rose substantially in European countries during the 1990s. Over this period the market for corporate control became more international. One study reported that, between 1985 and 1999, takeovers involving a European party went from 11 percent to 47 percent of the total market value of all transactions worldwide.

Meanwhile, in the United States, the enactment of the Gramm-Leach-Bliley Act in 1999 relaxed previous prohibitions against bank participation in the ownership of stock. Banks in other developed countries, such as Germany and Japan, appear to use the information they obtain as lenders to play a more effective role as stockholders in monitoring corporate management. Banks' participation in U.S. corporations as both lenders and shareholders may similarly improve corporate efficiency. To the extent investors view increased bank participation in both lending and stock ownership as committing corporations to stronger performance, the effect may be not just more efficient monitoring of management but better investor assurance as well.

Conclusion

Corporate governance systems, by establishing checks and balances that influence the decisions of corporate managers, affect corporate efficiency and, by implication, economic growth. To the extent that these systems are observable—that is, transparent—to outsiders such as households and other prospective investors, they can affect their willingness to do business with the

corporation. Strong managers who seek growth for their corporations thus stand to gain by creating strong corporate governance systems. In doing so, they can distinguish themselves and their corporations from others with less promising prospects.

Major changes in the legal institutions that support U.S. corporate governance occurred last year. These changes and many private sector reform initiatives illustrate the application of three core principles underlying a plan for corporate governance reform that the President set forth in March 2002. These principles are familiar to economists: information accuracy and accessibility, management accountability, and auditor independence. The Sarbanes-Oxley Act of 2002, by strengthening certain legal institutions, promotes greater accuracy and accessibility of information and addresses concerns about the independence of external auditors. The establishment of the Corporate Fraud Task Force in July 2002, along with new enforcement initiatives by the SEC, acts on the principle of management accountability by subjecting offending managers and their organizations to a higher probability of getting caught and greater sanctions when they do get caught. The Sarbanes-Oxley Act further strengthens management accountability by allowing the courts to impose stronger sanctions on white-collar offenders and instructing the U.S. Sentencing Commission to update related sentencing guidelines to ensure their consistency with current information on the seriousness of the offense and with the new statutory increases in maximum sanctions. The act indeed implements each of the 10 points of the plan for reform that the President articulated in his March speech.

Perhaps the most important reforms along the lines of the President's plan, however, have occurred in the private sector. Many managers—and management teams—have instituted improvements in the internal governance of their corporations; their actions are apparent in numerous press releases and in disclosures to the SEC. The appropriate reform for each corporation ultimately depends on the specific market conditions that it faces. Changes specific to individual corporations include replacement of top managers and auditors and adjustments in the compensation of top management and how it is reported. More dramatic and far-ranging are the proposals by the NYSE and the Nasdaq to tighten the standards that public corporations must meet in order for their stock to be listed and traded on those markets. Some of these proposals follow early action taken by the Chairman of the SEC to request that these and other private self-regulatory organizations revisit and revise their standards in early 2002, following the President's call for reform. The SEC and other Federal agencies will implement reforms under the Sarbanes-Oxley Act in phases over the next several years.

U.S. managers, investors, and regulators are thus embarked on making changes to U.S. corporate governance of a scope not seen since the creation of

the SEC itself. The current push for reform will make use of new knowledge gleaned from recent events and will apply this learning toward improving the quality of managers' and board members' commitments to act in shareholders' interest. Despite their scope, however, these changes do not fundamentally depart from the evolutionary process that U.S. corporate governance has followed over the past century. The fundamental building blocks of corporate governance remain unchanged.

Competition will continue to shape the evolution of U.S corporate governance. This competition will affect different corporations differently, depending on the nature of the markets in which they operate. Many of these markets have become more global in recent years, and this globalization will continue to place pressure on managers, investors, and public officials to confront the issues that changing markets and technology can raise. The capacity of individual corporations and of the Nation's markets and public sector institutions to promote increasingly effective resource utilization will depend on their continuing success in committing corporate managers to act in the best interests of shareholders and other investors, so as to limit the agency costs of separating ownership from control. In so doing they will continue to foster the efficient growth that the corporate sector of the economy has enjoyed through its ongoing access to deep and resilient financial markets.